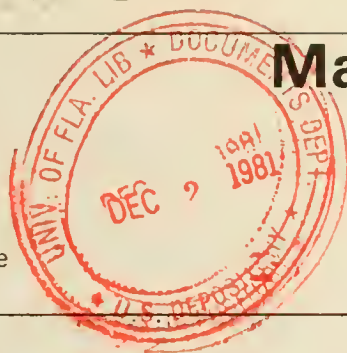




U.S. Department of Commerce
BUREAU OF THE CENSUS



Manufacturers' Shipments, Inventories, and Orders

AUGUST 1981

M3-1(81)-8
For Wire Transmission 3:00 P.M. E.D.T. Thursday, October 1, 1981

(All figures in text below are in seasonally adjusted current dollars.)

New orders for manufactured goods decreased in August \$3.2 billion or 1.9 percent to \$169.2 billion, the Department of Commerce, Bureau of the Census reported today. This is the first decline in orders at the all manufacturing level since the 0.9 percent decline in January. The order increases from February through June were all less than 1 percent.

New orders for durable goods declined \$3.1 billion or 3.5 percent in August to \$86.3 billion, revised from the earlier reported 2.5 percent decline. The nondurable goods industries showed almost no change from July. The largest declines in durable goods new orders were reported by aircraft, primary metals, and fabricated metals producers. In the aircraft industry, where new orders are volatile on a month-to-month basis, new orders were down \$0.9 billion or 14.4 percent to \$5.2 billion. New orders for aircraft so far this year have averaged \$5.2 billion per month as compared to a \$5.8 billion average for January through August of 1980.

The decline in August new orders for fabricated metal products was estimated at \$1.0 billion, down 9.0 percent from July to \$9.8 billion. This is the largest decrease in that category since a 9.0 percent decline in March 1980. In the primary metals category, both steel and nonferrous metal manufacturers reported declines. New orders for steel were down \$0.4 billion or 5.8 percent to \$6.1 billion, while orders for nonferrous products were off \$0.3 billion or 6.9 percent to \$4.5 billion.

New orders for nondefense capital goods were valued at \$24.2 billion, unchanged from July. A 6.8 percent increase in the nonelectrical machinery component was offset by declines in most of the other categories. New orders of defense capital goods increased \$0.3 billion or 6.3 percent to \$5.8 billion, with all components except complete aircraft increasing.

Shipments of manufactured goods in August declined \$1.4 billion or 0.8 percent to \$168.7 billion, following an equal decline in July of \$1.4 billion or 0.8 percent. The August declines were widespread. Within the durable goods sector, most of the industries showed declines of \$0.1 billion to \$0.2 billion each. The only significant increase in durable goods shipments

occurred in the aircraft industry, where deliveries were up \$0.4 billion or 8.4 percent to \$4.8 billion.

Shipments of nondurable goods, valued at \$82.8 billion, were off \$0.2 billion or 0.2 percent from July. An increase in petroleum shipments of \$0.7 billion or 4.1 percent was offset by declines in nearly all of the other categories. Excluding the petroleum industry, nondurable goods shipments were down 1.2 percent.

The backlog of orders for manufactured goods in August increased \$0.5 billion or 0.2 percent to \$328.7 billion. The pattern of change throughout the industries was mixed. Increases in the orders backlog for transportation equipment and machinery of \$1.1 billion and \$0.5 billion, respectively, were partially offset by declines in the primary metals order backlog of \$0.3 billion and the fabricated metals backlog of \$0.6 billion. The backlog of defense orders increased \$1.4 billion or 1.9 percent to \$77.4 billion.

The book value of manufacturers' inventories in August increased \$0.8 billion or 0.3 percent to \$272.6 billion. The primary and fabricated metal products industries reported much larger increases, going up 1.9 percent and 1.3 percent, respectively. Significant declines in inventories occurred in the motor vehicle and parts industry, down \$0.3 billion or 3.5 percent to \$9.1 billion, and the petroleum industry, down \$0.5 billion or 4.7 percent also to \$9.1 billion. The change in the inventory value by stage of fabrication showed raw materials and supplies declining 0.8 percent, work in process increasing 0.6 percent, and finished goods increasing 1.2 percent. The inventory to shipments ratio for manufactures in August was 1.62, up from 1.60 in July.

The figures on the durable goods industries in this report supersede those issued earlier in the advance report on durable goods. The present report is based on more complete reporting, but the estimates are also considered preliminary. Final figures will appear as historical data in the report to be published for next month. The advance report on durable goods for September is scheduled for release on October 22, 1981, and the full report is scheduled for release on November 2, 1981.

Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Ruth Runyan or Kathleen Swindell-Menth, (301) 763-2502.

For sale by Customer Services (DUSD) Bureau of the Census, Washington, D.C. 20233, or any U.S. Department of Commerce district office. Postage stamps not acceptable; currency submitted at sender's risk. Remittances from foreign countries must be by international money order or by a draft on a U.S. bank. Price, 30 cents per copy, \$3.60 per year.

Table 1. VALUE OF MANUFACTURERS' SHIPMENTS FOR INDUSTRY GROUPS, MARKET CATEGORIES, AND SUPPLEMENTARY SERIES
(Millions of dollars)

SIC	Industry	Not seasonally adjusted ¹																
		Seasonally adjusted						Monthly										
		Monthly			Quarterly			Last 4 months			Last 4 months n year ago							
		Aug. 1981 ²	July 1981 ²	June 1981	May 1981	II 1981	I 1981	IV 1980	Aug. 1981 ²	July 1981 ²	June 1981	May 1981	Aug. 1980	July 1980	June 1980	May 1980	Year to date	
TOTALS																		
	All manufacturing industries.....	168,654	170,068	171,494	167,527	506,512	495,900	487,142	165,937	156,408	179,978	169,040	147,823	137,631	152,930	166,729	1,335,888	1,195,728
	Manufacturing industries excluding transportation.....	149,673	151,357	151,054	148,397	447,982	443,169	434,123	149,588	140,035	158,054	148,973	135,371	124,489	138,123	132,208	1,187,541	1,076,628
	Manufacturing industries with unfilled orders.....	88,929	89,970	90,056	88,369	266,373	260,886	254,362	87,124	81,378	95,405	89,150	76,159	70,695	80,343	76,963	701,692	626,050
	Durable goods industries.....	85,827	87,063	88,770	86,664	261,761	252,602	249,229	82,431	78,497	95,046	88,289	71,609	67,470	77,051	73,517	684,540	603,097
	Durable goods with unfilled orders.....	71,916	72,667	73,128	71,630	215,863	211,253	206,900	69,776	65,432	78,110	72,411	60,803	56,573	64,949	62,110	568,327	505,870
	Nondurable goods industries.....	82,827	83,005	82,724	80,863	244,751	243,298	237,913	83,506	77,911	84,932	80,751	76,214	70,161	75,879	73,212	651,348	592,631
	Nondurable goods with unfilled orders.....	17,013	17,303	16,928	16,739	50,510	49,633	47,462	17,348	15,946	17,295	16,739	15,356	14,122	15,394	14,853	133,364	120,180
MARKET CATEGORIES																		
	Home goods and apparel.....	12,234	12,792	12,572	12,235	37,089	36,096	34,982	13,230	11,555	12,942	11,591	11,821	10,088	11,074	10,298	96,064	86,949
	Consumer staples.....	28,975	29,219	29,344	28,207	86,554	86,007	85,574	28,933	27,414	29,981	27,841	28,327	25,899	27,713	26,289	227,645	212,146
	Equipment and defense products, except automotive.....	25,767	25,208	25,938	25,241	76,364	74,189	72,322	24,533	23,026	28,002	25,416	21,415	20,971	24,505	22,872	200,152	179,542
	Automotive equipment.....	13,848	14,125	15,230	14,134	43,191	37,980	38,354	11,723	12,095	16,381	15,019	8,514	8,783	9,880	9,619	109,223	82,897
	Construction materials, supplies, and intermediate products.....	12,304	12,754	12,696	12,812	38,564	39,202	38,302	13,082	12,516	13,862	13,275	12,213	11,348	11,961	11,039	102,335	92,731
	Other materials, supplies, and intermediate products.....	75,526	75,970	75,714	74,898	224,749	222,426	217,607	74,436	69,802	78,810	75,898	65,533	60,542	67,797	66,612	600,462	541,463
SUPPLEMENTARY SERIES ²																		
	Household durable goods indus- tries.....	5,091	5,512	5,403	5,291	16,241	15,738	15,132	5,377	4,715	5,606	5,105	4,948	4,081	4,624	4,516	41,405	37,359
	Capital goods industries.....	28,630	28,160	28,714	27,982	84,669	81,803	80,358	27,109	25,580	30,788	27,969	23,549	23,201	27,022	25,127	221,004	199,592
	Nondefense.....	24,736	23,931	24,602	24,041	72,453	70,217	69,267	22,920	21,671	26,488	23,954	20,315	20,008	23,510	21,639	189,195	173,549
	Defense.....	4,394	4,229	4,112	3,941	12,017	11,586	11,092	4,189	3,909	4,300	4,015	3,234	3,193	3,512	3,434	31,806	26,043
INDUSTRY GROUPS AND INDUSTRIES																		
Durable goods industries:																		
32	Stone, clay, and glass products.....	4,021	4,250	4,207	4,180	12,680	12,597	12,062	4,306	4,151	4,592	4,279	3,907	3,636	3,871	3,627	33,346	29,397
322	Glass containers.....	499	546	546	498	1,567	1,386	1,290	521	515	576	501	437	410	435	397	4,012	3,208
33	Primary metals.....	11,935	11,971	11,810	11,824	35,325	35,521	34,933	11,511	10,806	12,628	12,267	9,953	9,137	10,367	10,671	95,806	89,347
331	Iron and steel mills.....	6,115	6,228	6,172	6,209	18,482	17,804	17,477	5,925	5,736	6,617	6,364	4,390	3,990	4,593	4,847	49,341	40,801
333-9	Nonferrous and other primary metals.....	4,684	4,667	4,522	4,627	13,654	14,197	14,093	4,497	4,144	4,789	4,683	4,621	4,324	4,715	4,755	37,300	39,822
34	Fabricated metal products.....	10,439	10,567	10,591	10,594	31,644	31,279	31,490	10,540	9,701	11,300	10,800	9,414	8,450	9,522	9,129	83,807	75,512
341	Metal cans, barrels, and drums.....	823	844	810	826	2,488	2,617	2,614	975	925	921	865	977	908	921	872	6,954	6,979
35	Machinery, except electrical... Engines and turbines.....	16,915	17,070	17,303	16,775	50,914	50,128	48,324	15,927	15,465	18,736	16,869	13,860	13,673	16,175	14,761	134,743	118,385
351	Engines and turbines.....	1,435	1,547	1,364	1,373	3,864	3,645	3,689	1,326	1,258	1,489	1,362	1,002	1,017	1,274	1,164	10,497	9,175
352	Farm machinery and equipment... Construction, mining, and material-handling equipment...	1,170	1,264	1,306	1,216	3,800	3,614	3,689	1,082	1,041	1,428	1,309	1,044	945	1,200	1,134	10,204	9,213
353	Construction, mining, and material-handling equipment...	3,463	3,318	3,315	3,318	9,856	9,619	8,995	3,352	3,196	3,471	3,384	2,773	2,703	2,934	2,909	26,531	23,664
354	Metalworking machinery.....	1,010	955	958	944	2,910	2,957	2,987	910	832	1,078	939	811	741	1,047	907	7,797	7,197
356	General industrial machinery...	1,482	1,491	1,410	1,481	4,282	4,071	4,123	1,424	1,355	1,537	1,509	1,247	1,192	1,420	1,278	11,299	10,454

See footnote at end of table.

TABLE 1. VALUE OF MANUFACTURERS' SHIPMENTS FOR INDUSTRY GROUPS, MARKET CATEGORIES, AND SUPPLEMENTARY SERIES--Continued
(Millions of dollars)

SIC	Industry	Seasonally adjusted					Not seasonally adjusted ¹					Year to date																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
		Monthly			Quarterly		Aug. 1981 ^P	Monthly			Last 4 months a year ago			Aug. 1980	May 1981	June 1980	July 1980	May 1980	June 1980	July 1980	Aug. 1980	Sept. 1980	Oct. 1980	Nov. 1980	Dec. 1980	Total 1980																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
		July 1981 ^r	June 1981	May 1981	I 1981	II 1981		IV 1980	July 1981 ^r	June 1981	May 1981	Aug. 1980	July 1980														June 1980	May 1980																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										

^PPreliminary. ^rRevised.

¹Shipments and new orders are the totals for the period and are adjusted for trading-day and calendar-month variations; unfilled orders and inventories are as of the end of the period and are not adjusted for trading-day or calendar-month variations.

²The supplementary series are regroupings of the separate industry categories as follows:

Household durable goods industries--household furniture; kitchen articles and pottery; cutlery, handtools, and hardware; household appliances; radio and TV; ophthalmic goods, watches, and clocks; and miscellaneous personal goods.
Capital goods industries--Comparable to the previous producers' capital goods and the defense products (old series) categories.
Nondefense products--Machinery, except electrical (excluding farm machinery and equipment and machine shops), electrical machinery (excluding household appliances, radio and TV, and electronic components), and the nondefense portions of shipbuilding and repairing and railroad equipment, communication equipment, aircraft and aircraft parts, and ordnance.
Defense products--Based on separate reports on defense work filled by large defense contractors in the following industries: Ordnance, communication equipment, aircraft and aircraft parts, and shipbuilding.
The data are comparable to those published annually in the MA-175, "Shipments to Federal Government Agencies" (formerly "Shipments of Defense-Oriented Industries"), for the specified industries.

Table 2. VALUE OF MANUFACTURERS' NEW ORDERS FOR INDUSTRY GROUPS, MARKET CATEGORIES, AND SUPPLEMENTARY SERIES

(\$billions of dollars)

SIC	Industry	Seasonally adjusted						Not seasonally adjusted ¹										
		Monthly			Quarterly			Monthly						Last 4 months a year ago				
		Aug. 1981P	July 1981P	June 1981	May 1981	II 1981	I 1981	IV 1980	Aug. 1981P	July 1981P	June 1981	May 1981	Aug. 1980	July 1980	June 1980	May 1980	1981	1980
	TOTALS																	
	All manufacturing industries.....	169,163	172,355	170,913	169,340	508,837	499,772	491,844	164,145	156,831	178,014	168,602	147,422	140,637	149,872	140,850	1,343,304	1,202,300
	Manufacturing industries excluding transportation.....	149,053	151,702	151,856	149,247	450,989	443,887	440,295	148,205	139,882	157,868	148,642	135,497	124,899	134,779	127,209	1,194,210	1,076,255
	Manufacturing industries with unfilled orders.....	89,438	92,257	89,475	90,182	268,697	264,758	259,064	85,332	81,801	93,441	88,712	75,758	73,701	77,285	71,084	709,107	632,622
	Durable goods industries.....	86,325	89,440	88,303	88,164	263,647	256,383	253,912	80,707	79,035	93,280	87,680	71,133	70,674	74,435	68,160	691,326	610,037
	Durable goods with unfilled orders.....	72,414	75,044	72,661	73,130	217,748	215,034	211,584	68,052	65,970	76,344	71,802	60,327	59,777	62,333	56,753	575,113	512,810
	Nondurable goods industries.....	82,838	82,915	82,610	81,176	245,190	243,389	237,931	83,438	77,796	84,734	80,922	76,289	69,963	75,437	72,690	651,977	592,263
	Industries with unfilled orders.....	17,024	17,213	16,814	17,052	50,949	49,724	47,481	17,280	15,831	17,097	16,910	15,431	13,924	14,952	14,331	133,992	119,812
	Industries without unfilled orders.....	65,814	65,702	65,796	64,124	194,241	193,665	190,451	66,158	61,965	67,637	64,012	60,858	56,039	60,485	58,359	517,982	472,451
	MARKET CATEGORIES																	
	Home goods and apparel.....	12,123	12,828	12,776	12,083	37,187	36,749	34,894	13,208	11,782	13,168	11,484	11,927	10,089	11,006	10,174	97,473	87,257
	Consumer staples.....	28,985	29,253	29,384	28,188	86,647	86,030	85,565	28,954	27,502	30,010	27,802	28,343	25,932	27,706	26,244	227,824	212,235
	Equipment and defense products, except automotive.....	27,157	26,944	25,025	25,365	75,996	78,323	75,474	23,693	23,421	26,642	24,852	20,789	22,390	24,484	21,083	203,766	186,642
	Automotive equipment.....	13,944	14,218	15,083	14,258	43,163	38,292	38,807	11,838	12,247	16,189	15,040	8,371	8,857	9,463	9,156	109,633	80,723
	Construction materials, supplies, and intermediate products.....	11,994	12,900	13,166	12,755	38,764	39,024	38,490	12,715	12,615	14,265	13,239	12,012	11,180	11,722	11,212	102,623	92,399
	Other materials, supplies, and intermediate products.....	74,960	76,212	75,479	76,691	227,079	221,355	218,614	73,737	69,264	77,740	76,185	65,980	62,189	65,491	62,981	601,974	543,044
	SUPPLEMENTARY SERIES ²																	
	Household durable goods indus- tries.....	4,996	5,510	5,625	5,119	16,347	16,412	15,001	5,379	4,910	5,845	4,981	5,064	4,068	4,571	4,439	42,778	37,769
	Capital goods industries.....	30,025	29,708	28,186	29,248	86,133	86,096	81,974	26,459	25,741	29,537	27,903	23,209	26,899	26,948	23,080	225,979	211,500
	Nondefense.....	24,195	24,226	23,230	23,865	71,818	70,468	69,640	22,150	21,673	25,090	22,797	19,534	21,264	22,785	19,273	189,193	177,262
	Defense.....	5,830	5,482	4,956	5,383	14,315	15,629	12,334	4,309	4,068	4,447	5,106	3,675	5,635	4,163	3,807	36,781	34,238
	INDUSTRY GROUPS AND INDUSTRIES																	
	Durable goods industries:																	
32	Stone, clay, and glass.....	4,035	4,246	4,259	4,217	12,686	12,425	12,095	4,264	4,165	4,602	4,295	3,809	3,629	3,707	3,561	33,374	29,297
33	Primary metals.....	11,598	12,466	11,324	11,809	36,964	34,228	37,171	10,827	10,471	11,561	11,802	10,521	8,883	8,995	8,513	94,529	86,171
331	Iron and steel mills.....	6,065	6,436	6,040	6,076	18,453	17,291	19,174	5,466	5,353	6,106	5,966	5,124	3,888	3,913	3,631	49,073	38,975
333-5,9	Nonferrous and other primary metal products.....	4,508	4,842	4,235	4,612	13,322	13,746	14,625	4,349	4,071	4,386	4,673	4,513	4,321	4,296	4,406	36,814	39,454
34	Fabricated metal products.....	9,828	10,804	10,979	10,607	31,877	31,223	31,880	9,958	10,054	11,581	10,673	9,099	8,491	9,132	8,915	83,919	75,079
35	Machinery, except electrical...	17,189	16,376	17,303	17,082	51,889	50,334	50,070	15,766	15,001	18,838	16,635	13,152	14,606	15,596	13,149	136,323	117,104
351	Engines and turbines.....	1,486	1,261	1,449	1,325	4,335	4,200	3,686	1,498	1,124	1,412	1,241	1,270	898	714	900	11,011	8,268
353	Construction, mining, and material-handling equipment...	3,330	3,629	3,856	3,523	11,085	10,615	9,619	3,096	3,517	3,897	3,440	2,592	2,665	2,648	2,633	28,836	23,153
354	Metallurgical machinery.....	787	729	754	741	2,333	2,701	2,617	808	620	855	709	635	735	1,027	757	6,826	7,547
356	General industrial machinery...	1,648	1,549	1,335	1,620	4,526	4,198	4,014	1,618	1,447	1,481	1,568	1,160	1,125	1,336	1,244	12,027	10,015

See footnotes at end of table.

Table 3. VALUE OF MANUFACTURERS' UNFILLED ORDERS FOR INDUSTRY GROUPS, MARKET CATEGORIES, AND SUPPLEMENTARY SERIES
(Billions of dollars)

SIC	Industry	Seasonally adjusted												Not seasonally adjusted ¹											
		Monthly						Quarterly						Last 4 months						Monthly					
		Aug. 1981 ²	July 1981 ²	June 1981	May 1981	I 1981	IV 1980	III 1980	II 1980	I 1980	Aug. 1981 ²	July 1981 ²	June 1981	May 1981	Aug. 1980	July 1980	June 1980	May 1980							
TOTALS		328,710	328,206	325,918	326,508	323,602	319,729	315,027	306,494	313,627	325,082	326,866	326,446	328,411	309,461	309,862	306,856	309,914							
All manufacturing industries.....		210,124	210,750	210,403	209,608	207,405	206,686	200,514	197,955	207,945	210,016	211,390	211,546	211,732	199,483	199,357	198,947	202,291							
Manufacturing industries excluding transportation.....		317,347	316,853	314,477	314,954	312,598	308,815	304,133	295,750	301,963	313,785	315,502	314,968	316,736	298,796	299,272	296,068	298,684							
Durable goods industries.....		11,363	11,353	11,441	11,554	11,005	10,913	10,895	10,744	11,663	11,297	11,364	11,478	11,675	10,665	10,590	10,788	11,230							
Nondurable goods industries.....																									
MARKET CATEGORIES																									
Home goods and apparel.....		4,819	4,922	4,854	4,609	4,664	3,988	4,085	4,215	4,646	5,279	5,278	4,966	4,710	4,440	4,318	4,284	4,359							
Consumer staples.....																									
Equipment and defense products, except automotive.....		194,242	192,756	190,926	191,990	191,324	186,876	183,272	177,896	178,932	190,863	191,588	191,039	192,595	178,652	179,421	177,928	178,366							
Automotive equipment.....		17,443	17,752	17,607	17,137	17,409	17,587	17,399	17,749	17,973	17,537	17,903	17,805	17,401	17,584	17,785	17,953	18,192							
Construction materials, supplies, and intermediate products.....		112,206	112,776	112,531	112,772	110,206	111,277	110,270	106,635	112,077	111,403	112,097	112,636	113,705	108,785	108,338	106,691	108,997							
Other materials, supplies, and intermediate products.....																									
SUPPLEMENTARY SERIES ²																									
Household durable goods indus- tries.....		3,632	3,728	3,732	3,511	3,628	2,954	3,084	3,220	3,569	4,080	4,076	3,884	3,644	3,428	3,312	3,325	3,378							
Capital goods industries.....		224,926	223,533	221,984	222,518	220,323	216,028	214,413	206,684	205,016	221,089	221,738	221,577	222,829	209,636	209,976	206,278	206,352							
Nondefense.....		147,540	147,581	147,288	148,666	147,924	147,673	147,300	146,477	147,865	146,475	147,241	148,640	146,824	147,605	146,349	147,074	147,334							
Defense ³		77,386	75,952	74,696	73,852	72,398	68,355	67,113	60,207	57,151	74,614	74,495	74,336	74,189	62,812	62,371	59,929	59,278							
INDUSTRY GROUPS AND INDUSTRIES																									
Durable goods industries:																									
Stone, clay, and glass.....		2,301	2,287	2,292	2,240	2,288	2,460	2,426	2,531	2,863	2,324	2,365	2,351	2,341	2,492	2,590	2,597	2,761							
Primary metals.....		28,751	29,090	28,595	29,080	28,955	30,248	28,010	25,487	29,676	28,177	28,862	29,197	30,264	26,274	25,706	25,960	27,334							
Blast furnaces, steel mills, Nonferrous and other primary metal products.....		17,054	17,105	16,897	17,028	16,926	17,439	15,742	13,258	15,859	16,628	17,088	17,471	17,982	14,341	13,607	13,709	14,389							
Fabricated metal products.....		8,423	8,599	8,425	8,712	8,557	9,008	8,476	8,219	8,849	8,288	8,436	8,509	8,912	8,198	8,306	8,309	8,728							
Machinery, except electrical.....		30,007	30,620	30,362	29,975	30,134	30,189	29,800	30,749	31,504	30,080	30,661	30,309	30,028	30,411	30,726	30,685	31,055							
Engines and turbines.....		75,159	74,885	75,578	75,580	74,602	74,396	72,850	71,914	75,861	75,102	75,262	75,725	75,620	72,289	72,997	72,064	72,643							
Construction, mining, and material-handling equipment.....		18,239	18,188	18,474	18,391	18,241	17,905	17,864	17,825	18,626	18,180	18,008	18,142	18,218	17,669	17,401	17,520	18,080							
Metalworking machinery.....		11,167	11,299	10,989	10,448	9,760	8,765	8,141	8,062	8,810	11,055	11,311	10,989	10,563	7,851	8,032	8,070	8,356							
General industrial machinery.....		6,010	6,233	6,459	6,663	7,035	7,292	7,661	7,986	8,046	6,106	6,208	6,420	6,643	7,756	7,932	7,938	7,958							
356		6,773	6,606	6,547	6,623	6,304	6,177	6,287	6,615	7,238	6,820	6,626	6,534	6,589	6,454	6,541	6,608	6,692							

See footnotes at end of table.

Table 3. VALUE OF MANUFACTURERS' UNFILLED ORDERS FOR INDUSTRY GROUPS, MARKET CATEGORIES, AND SUPPLEMENTARY SERIES--Continued
(Millions of dollars)

SIC	Industry group	Seasonally adjusted								Not seasonally adjusted ¹								
		Monthly				Quarterly				Monthly								
		Aug. 1981 ^p	July 1981 ^p	June 1981	May 1981	I 1981	IV 1980	III 1980	II 1980	I 1980	Aug. 1981 ^p	July 1981 ^p	June 1981	May 1981	Aug. 1980	July 1980	June 1980	May 1980
	INDUSTRY GROUP AND INDUSTRIES-- continued	50,645	50,466	50,124	49,207	48,484	47,225	45,819	45,341	44,505	50,649	50,420	50,257	49,637	45,953	45,387	45,483	45,685
	Durable goods industries-- Continued																	
36	Electrical machinery.....		8,475	8,392	8,446	8,361	7,967	7,905	8,027	7,735	8,497	8,460	8,439	8,522	8,042	8,063	8,066	8,123
361,2	Electrical transmission and distribution equipment and		391	415	434	415	411	451	319	294	419	455	460	449	395	345	338	299
363	Industrial apparatus.....		459	407	378	189	482	346	422	416	389	605	438	388	165	522	411	426
365	Radio and TV.....		27,914	27,788	27,542	26,830	26,345	25,427	23,863	22,802	27,527	27,505	27,407	27,117	23,489	22,870	22,698	22,912
366	Communication equipment.....		12,270	12,207	12,207	12,141	11,733	12,019	12,135	12,695	12,854	12,430	12,363	12,390	12,432	12,631	12,873	12,932
367	Electronic components.....		118,586	117,456	115,515	116,900	116,198	113,043	114,513	108,540	105,682	115,066	115,476	114,900	116,679	110,505	107,909	107,623
37	Transportation equipment.....																	
372,6	Aircraft, missiles, and parts.....		92,574	92,166	91,319	91,299	88,371	90,466	85,924	80,345	89,857	90,625	90,015	91,055	87,600	88,020	85,408	84,134
3731	Shipbuilding and military																	
3795	tank vehicles.....		17,880	17,166	16,953	16,478	16,087	15,421	13,490	13,549	17,141	16,811	16,975	17,399	13,769	13,519	13,513	13,641
38	Instruments and related products.....		7,143	7,173	7,056	6,982	7,012	6,987	6,863	6,944	7,064	7,217	7,226	7,110	6,980	6,929	6,997	6,972
25	All other durable goods industries.....		4,755	4,876	4,955	4,990	4,915	4,267	4,050	4,244	4,809	5,170	5,230	5,119	5,187	4,432	4,373	4,611

^pPreliminary. ^rRevised.

¹Shipments and new orders are the totals for the period and are adjusted for trading-day and calendar-month variations; unfilled orders and inventories are of the end of the period and are not adjusted for trading-day or calendar-month variations.

²The supplementary series are regroupings of the separate industry categories as follows:

Household durable goods industries--Household furniture: kitchen articles and pottery; cutlery, handtools, and hardware; household appliances: radio and TV; ophthalmic goods, watches, and clocks; and miscellaneous personal goods.

Capital goods industries--Comparable to the previous producers' capital goods and the defense products (old series) categories.

Nondefense products--Machinery, except electrical (excluding farm machinery and equipment and machine shops), electrical machinery (excluding household appliances, radio and TV, and electronic components), the nondefense portions of shipbuilding and repairing and railroad equipment, communication equipment, aircraft and aircraft parts, and ordnance.

Defense products--Based on separate reports on defense work filed by large defense contractors in the following industries: Ordnance, communication equipment, aircraft and aircraft parts, and shipbuilding.

The data are comparable to those published annually in the MA-475, "Shipments to Federal Government Agencies" (formerly "Shipments of Defense-Oriented Industries"), for the specified industries.

Table 4. VALUE OF MANUFACTURERS' INVENTORIES FOR INDUSTRY GROUPS, MARKET CATEGORIES, AND SUPPLEMENTARY SERIES
(Millions of dollars)

SIC	Industry	Seasonally adjusted												Not seasonally adjusted ¹											
		Monthly						Quarterly						Monthly											
		Aug. 1981 ^p	July 1981 ^r	June 1981	May 1981	I 1981	IV 1980	III 1980	II 1980	I 1980	Aug. 1981 ^p	July 1981 ^r	June 1981	May 1981	Aug. 1980	July 1980	June 1980	May 1980							
TOTALS																									
	All manufacturing industries.....	272,640	271,872	269,709	269,260	266,524	257,980	256,835	256,421	251,486	271,886	271,008	270,228	271,609	255,938	256,220	256,910	258,418							
	Manufacturing industries excluding transportation.....	233,966	232,923	231,081	230,833	228,413	221,170	221,393	221,992	218,073	232,901	232,474	231,971	233,131	220,501	222,002	222,856	224,348							
	Manufacturing industries with unfilled orders.....	186,555	185,230	183,036	181,809	180,275	174,756	173,231	173,188	169,197	186,826	186,037	184,647	184,421	173,797	174,371	174,706	175,241							
	Durable goods industries.....	182,005	180,855	178,676	177,635	176,229	171,603	170,163	169,769	166,715	181,757	180,681	179,710	179,959	170,295	170,144	170,744	172,050							
	Durable goods with unfilled orders.....	166,071	164,737	162,821	161,682	160,227	155,430	153,986	153,669	150,127	166,015	165,061	163,814	163,733	154,204	154,572	154,582	155,246							
	Nondurable goods industries.....	90,635	91,017	91,033	91,625	90,295	86,377	86,672	86,652	84,771	90,129	90,327	90,518	91,650	85,643	86,076	86,166	86,368							
	Nondurable goods with unfilled orders.....	20,484	20,493	20,215	20,127	20,047	19,326	19,245	19,520	19,071	20,811	20,976	20,833	20,688	19,593	19,799	20,124	19,995							
MARKET CATEGORIES																									
	Home goods and apparel.....	21,960	21,637	21,410	21,761	21,201	20,663	20,395	20,706	20,446	22,337	22,338	22,510	22,617	20,844	21,156	21,750	21,650							
	Consumer staples.....	32,956	32,826	32,658	32,891	32,880	32,201	31,988	31,283	31,312	32,487	31,765	31,704	32,149	31,550	30,815	30,340	30,611							
	Equipment and defense products, except automotive.....	74,083	73,756	73,240	72,697	71,400	69,908	69,288	67,787	64,824	73,768	73,743	73,432	73,455	68,940	68,733	67,989	67,873							
	Automotive equipment.....	11,352	11,688	11,530	11,592	11,775	11,872	11,589	12,267	12,989	11,497	10,968	11,237	11,524	11,781	11,200	11,962	12,587							
	Construction materials, supplies, and intermediate products.....	22,747	22,613	22,393	22,055	21,602	21,266	20,809	20,999	21,199	22,465	22,517	22,544	22,469	20,724	20,923	21,133	21,564							
	Other materials, supplies, and intermediate products.....	109,542	109,352	108,478	108,264	107,666	102,070	102,767	103,380	100,715	109,332	109,677	108,801	109,395	102,099	103,393	103,736	104,133							
SUPPLEMENTARY SERIES																									
	Household durable goods industries.....	10,615	10,446	10,250	10,323	10,236	9,992	9,980	10,198	10,158	10,761	10,657	10,598	10,710	10,211	10,264	10,542	10,642							
	Capital goods industries.....	83,625	83,283	82,376	81,608	80,456	78,245	77,469	75,420	72,363	83,445	83,469	82,777	82,606	76,856	76,688	75,811	75,663							
	Nondefense.....	70,929	70,602	69,676	69,335	68,473	67,224	67,021	65,672	63,118	70,595	70,527	69,941	70,162	66,393	66,449	65,950	65,950							
	Defense.....	12,696	12,681	12,700	12,273	11,984	11,021	10,447	9,749	9,246	12,850	12,942	12,836	12,444	10,463	10,239	9,861	9,704							
INDUSTRY GROUPS AND INDUSTRIES																									
	Durable goods industries:																								
32	Stone, clay, and glass products	6,772	6,642	6,599	6,509	6,398	6,145	6,016	6,189	6,034	6,680	6,680	6,681	6,732	5,990	6,175	6,266	6,332							
322	Glass containers.....	599	578	595	609	608	593	584	611	609	614	599	608	620	612	619	624	638							
33	Primary metals.....	24,391	23,926	23,334	23,163	23,640	21,976	22,022	22,555	22,248	24,311	23,914	23,398	23,277	22,199	22,579	22,592	22,703							
331	Blast furnaces, steel mills..	12,715	12,556	12,169	12,112	12,722	11,844	12,152	12,722	12,309	12,765	12,493	12,108	12,051	12,443	12,519	12,666	12,594							
333-6, 9	Nonferrous and other primary metals.....	10,263	10,016	9,819	9,686	9,563	8,802	8,564	8,484	8,577	10,161	10,076	9,888	9,812	8,459	8,729	8,543	8,656							
34	Fabricated metal products.....	20,297	20,031	19,973	19,796	19,812	19,773	19,395	20,020	20,167	20,287	20,210	20,208	20,220	19,568	19,892	20,263	20,805							
341	Metal cans, barrels, and drums.....	1,528	1,544	1,571	1,585	1,637	1,744	1,578	1,732	1,810	1,498	1,660	1,753	1,799	1,557	1,786	1,933	2,119							
35	Machinery, except electrical....	41,262	41,036	40,342	40,070	39,618	39,189	39,726	39,514	38,297	40,934	40,866	40,604	40,610	39,484	39,723	39,771	40,083							
351	Engines and turbines.....	2,424	2,472	2,423	2,378	2,423	2,474	2,457	2,522	2,654	2,394	2,426	2,455	2,423	2,429	2,463	2,549	2,689							
352	Farm machinery and equipment..	2,824	2,771	2,749	2,784	2,801	2,774	3,127	3,148	3,075	2,731	2,727	2,793	2,870	3,096	3,134	3,195	3,244							
353	Construction, mining, and material-handling equipment.....	9,077	8,951	8,789	8,653	8,469	8,446	8,650	8,766	8,416	8,949	8,915	8,806	8,714	8,580	8,703	8,784	8,748							
354	Metallworking machinery.....	2,676	2,719	2,636	2,660	2,624	2,760	2,855	2,833	2,703	2,676	2,714	2,644	2,694	2,861	2,860	2,846	2,866							
356	General industrial machinery....	3,868	3,787	3,753	3,670	3,603	3,561	3,627	3,637	3,569	3,841	3,795	3,786	3,696	3,634	3,642	3,670	3,658							

See footnotes at end of table.

Table 4. VALUE OF MANUFACTURERS' INVENTORIES FOR INDUSTRY GROUPS, MARKET CATEGORIES, AND SUPPLEMENTARY SERIES--Continued

(Millions of dollars)

SIC	Industry	Seasonally adjusted					Quarterly					Monthly					Not seasonally adjusted				
		Monthly					Quarterly					Monthly					Monthly				
		Aug. 1981 ^p	July 1981 ^r	June 1981	May 1981	I 1981	IV 1980	III 1980	II 1980	I 1980	Aug. 1981 ^p	July 1981 ^r	June 1981	May 1981	Aug. 1980	July 1980	June 1980	May 1980			
36	INDUSTRY GROUPS AND INDUSTRIES-- Continued	26,169	25,987	25,689	25,457	25,057	24,383	24,350	24,145	23,788	26,187	26,165	26,173	26,111	24,314	24,504	24,612	24,784			
361.2		Electrical machinery.....	4,596	4,573	4,488	4,428	4,263	4,163	4,222	4,263	4,142	4,556	4,558	4,526	4,520	4,221	4,293	4,298			
		Electrical transmission and distribution equipment and industrial apparatus.....	1,999	1,981	1,934	1,912	1,905	1,874	1,843	1,912	2,077	1,977	2,016	2,038	2,073	1,830	1,912	2,050			
363		Household appliances.....	1,582	1,550	1,492	1,481	1,444	1,311	1,292	1,309	1,269	1,663	1,622	1,561	1,571	1,383	1,363	1,371			
365		Radio and TV.....	8,868	8,886	8,774	8,835	8,774	8,630	8,589	8,178	7,867	8,847	8,854	8,903	8,935	8,465	8,388	8,193			
366		Communication equipment.....	4,832	4,849	4,795	4,741	4,560	4,557	4,450	4,422	4,253	4,832	4,887	4,798	4,798	4,456	4,459	4,414			
367		Electronic components.....	38,674	38,949	38,628	38,427	38,111	36,810	35,442	34,429	33,413	38,985	38,534	38,257	38,478	35,437	34,218	34,070			
37		Transportation equipment.....	9,071	9,397	9,275	9,376	9,605	9,694	9,609	9,865	10,388	9,303	8,788	9,035	9,295	9,635	9,610	10,084			
371		Motor vehicles and parts.....	25,156	25,151	24,820	24,421	24,001	22,918	21,835	20,160	18,638	25,252	25,327	24,755	24,566	21,521	20,918	20,095			
372.6		Aircraft, missiles, and parts																			
3731	Shipbuilding and military tank vehicles.....	2,482	2,433	2,636	2,724	2,612	2,265	2,105	2,130	1,922	2,521	2,550	2,621	2,726	2,198	2,219	2,122				
3795	Instruments and related products.....	9,573	9,569	9,603	9,645	9,380	9,281	9,037	8,994	8,727	9,599	9,645	9,771	9,854	9,103	9,121	9,154				
381-4	Scientific and engineering.....	6,833	6,834	6,842	6,839	6,593	6,474	6,309	6,263	5,988	6,799	6,847	6,924	6,941	6,324	6,347	6,338				
386	Photographic goods.....	2,241	2,224	2,247	2,267	2,259	2,243	2,172	2,135	2,112	2,294	2,284	2,321	2,358	2,203	2,194	2,205				
24	All other durable goods																				
25	Industries.....	14,867	14,715	14,508	14,568	14,213	14,046	14,175	13,923	14,040	14,774	14,667	14,618	14,677	14,200	13,932	14,032				
39	Nondurable goods industries:																				
20	Food and kindred products.....	21,603	21,836	21,862	22,114	22,237	22,325	22,368	21,263	21,377	21,117	20,818	20,774	21,276	21,389	20,811	20,191				
201	Ment products.....	2,164	2,175	2,267	2,216	2,272	2,271	2,138	2,005	2,051	2,082	2,118	2,256	2,256	2,053	1,997	1,997				
208	Beverages.....	3,628	3,705	3,743	3,797	3,909	3,866	3,770	3,895	3,849	3,472	3,553	3,653	3,820	3,589	3,645	3,802				
207	Fats and oils.....	1,515	1,662	1,648	1,787	1,792	2,055	2,388	1,840	1,678	1,221	1,464	1,559	1,723	1,532	1,719	1,739				
203-6.9	All other foods.....	12,602	12,564	12,456	12,551	12,476	12,428	12,408	11,885	12,092	12,577	11,886	11,509	11,672	12,564	11,758	10,970				
21	Tobacco products.....	3,931	3,765	3,570	3,699	3,689	3,507	3,628	3,507	3,487	3,605	3,351	3,403	3,592	3,281	3,184	3,339				
22	Textile mill products.....	6,559	6,608	6,604	6,562	6,518	6,386	6,102	6,250	6,274	6,588	6,638	6,739	6,733	6,078	6,178	6,377				
26	Paper and allied products.....	8,455	8,429	8,332	8,224	8,286	7,798	7,818	7,866	7,600	8,504	8,538	8,541	8,475	7,893	7,897	8,067				
261-3	Pulp, paper, etc.....	3,126	3,051	3,018	2,983	2,972	2,794	2,894	2,779	2,550	3,125	3,062	3,072	3,050	2,866	2,817	2,828				
265	Paperboard containers.....	2,321	2,267	2,255	2,204	2,188	1,973	1,971	2,094	2,042	2,346	2,333	2,312	2,252	2,018	2,098	2,144				
264	All other paper containers.....	3,008	3,111	3,108	3,097	3,126	3,032	2,953	2,993	3,007	3,033	3,143	3,207	3,173	3,009	2,982	3,088				
28	Chemicals and allied products.....	20,220	20,116	20,218	20,029	19,488	18,489	18,478	19,211	18,546	19,968	19,993	19,902	20,011	18,282	18,733	18,937				
281.6	Industrial chemicals, except pigments.....	6,870	6,849	6,961	6,880	6,693	6,244	6,200	6,714	6,275	6,822	6,856	6,822	6,880	6,201	6,496	6,580				
283.4	Drugs, soap, and toiletries.....	5,840	5,823	5,839	5,835	5,819	5,612	5,596	5,567	5,447	5,846	5,905	5,968	5,934	5,572	5,612	5,680				
29	Petroleum and coal products.....	9,149	9,604	9,996	10,278	9,885	8,240	8,805	8,711	7,966	9,252	9,601	9,761	10,204	8,835	8,803	8,525				
30	Rubber and plastics products, n.e.c.....	5,578	5,677	5,634	5,616	5,538	5,279	5,232	5,603	5,759	5,492	5,638	5,660	5,706	5,181	5,494	5,631				
23	All other nondurable goods																				
27	Industries.....	15,140	14,982	14,817	15,103	14,656	14,353	14,243	14,241	13,762	15,603	15,750	15,738	15,653	14,704	14,976	15,106				
31																					

^pPreliminary.^rRevised.

Shipments and new orders are the totals for the period and are adjusted for trading-day and calendar-month variations; unfilled orders and inventories are as of the end of the period and are not adjusted for trading-day or calendar-month variations.

The supplementary series are regroupings of the separate industry categories as follows:

Household durable goods industries--Household furniture; kitchen articles and pottery; cutlery, handtools, and hardware; household appliances; radio and TV; ophthalmic goods, watches, and clocks, and miscellaneous personal goods.

Capital goods industries--Comparable to the previous producers' capital goods and the defense products (old series) categories.

Nondefense products--Machinery, except electrical (excluding farm machinery and equipment and machine shops), electrical machinery (excluding household appliances, radio and TV, and electronic components), and the nondefense portions of shipbuilding and repairing and railroad equipment, communication equipment, aircraft and aircraft parts, and ordnance.

Defense products--Based on separate reports on defense work filed by large defense contractors in the following industries: Ordnance, communication equipment, aircraft and aircraft parts, and shipbuilding. The data are comparable to those published annually in the MA-175, "Shipments to Federal Government Agencies" (formerly "Shipments of Defense-Oriented Industries"), for the specified industries.

Table 5. VALUE OF MANUFACTURERS' INVENTORIES, BY STAGE OF FABRICATION, BY INDUSTRY GROUP
(Millions of dollars)

Industry	Seasonally adjusted										Not seasonally adjusted																					
	Monthly					Quarterly					Monthly					Last 4 months																
	Aug. 1981P	July 1981	June 1981	May 1981	1 1981	IV 1980	III 1980	II 1980	I 1980	Aug. 1981P	July 1981P	June 1981	May 1981	Aug. 1980	July 1980	June 1980	May 1980															
TOTALS										272,640	271,872	269,709	269,260	266,524	257,980	256,835	256,421	251,486	271,886	271,008	270,228	271,609	255,938	256,220	256,910	258,418						
All manufacturing industries.....										182,005	180,855	178,676	177,635	176,229	171,603	170,163	169,769	166,715	181,757	180,681	179,770	179,959	170,295	170,144	170,744	172,050	172,050					
Durable goods industries.....										6,772	6,642	6,599	6,509	6,398	6,145	6,016	6,189	6,034	6,680	6,680	6,681	6,732	5,990	6,175	6,266	6,332	6,332	6,332				
Stone, clay, and glass products.....										20,297	20,031	19,973	19,796	19,640	19,976	19,995	22,555	22,248	24,311	23,914	20,287	20,220	22,199	22,579	22,592	22,703	22,703	22,703	22,703			
Primary metals.....										41,262	40,036	39,618	39,730	39,189	39,189	39,325	39,514	38,297	40,934	40,866	40,604	40,610	39,484	39,723	39,771	40,083	40,083	40,083	40,083			
Nonferrous metal machinery.....										26,169	25,987	25,689	25,437	25,057	24,383	24,256	24,165	23,788	26,187	26,165	26,173	26,111	26,314	26,504	26,612	26,784	26,784	26,784	26,784	26,784		
Electrical machinery.....										38,074	38,069	38,028	38,427	38,111	36,810	35,462	34,629	33,613	38,985	38,534	38,257	38,678	35,437	36,218	36,054	36,054	36,054	36,054	36,054	36,054		
Transportation equipment.....										9,573	9,569	9,603	9,665	9,380	9,281	9,037	8,994	8,727	9,599	9,665	9,771	9,854	9,103	9,121	9,154	9,154	9,154	9,154	9,154	9,154	9,154	
Instruments and related products.....										14,867	14,715	14,508	14,568	14,213	14,066	14,175	13,923	14,040	14,774	14,667	14,618	14,677	14,200	14,332	14,332	14,332	14,332	14,332	14,332	14,332		
All other durable goods industries.....										90,635	91,017	91,033	91,625	90,295	86,377	86,672	86,652	84,771	90,129	90,327	90,518	91,650	85,643	86,076	86,166	86,368	86,368	86,368	86,368	86,368		
Chemicals and allied products.....										20,220	20,116	20,096	20,029	19,488	18,478	18,478	18,478	18,478	19,968	19,993	19,902	20,011	18,282	18,733	18,937	19,173	19,173	19,173	19,173	19,173		
Petroleum and coal products.....										9,149	9,064	9,096	9,078	8,885	8,240	8,240	8,240	8,240	9,252	9,601	9,761	10,204	8,835	8,803	8,825	8,825	8,825	8,825	8,825	8,825		
Rubber and plastics products, n.e.c.....										5,578	5,677	5,634	5,616	5,538	5,279	5,232	5,403	5,759	5,492	5,638	5,660	5,706	5,181	5,494	5,631	5,631	5,631	5,631	5,631	5,631	5,631	
All other nondurable goods industries.....										55,688	55,620	55,185	55,702	55,385	54,369	54,158	53,127	52,501	55,417	55,095	55,195	55,729	53,345	53,046	53,073	52,990	52,990	52,990	52,990	52,990	52,990	
MATERIALS AND SUPPLIES																																
All manufacturing industries.....										92,891	93,653	92,127	91,955	91,907	89,380	88,701	89,963	89,805	92,804	93,289	92,161	92,013	88,293	89,457	89,881	90,433	90,433	90,433	90,433	90,433		
Durable goods industries.....										56,664	56,867	55,816	55,282	55,495	53,808	53,587	54,624	54,934	57,024	56,786	55,864	55,338	54,073	54,402	54,652	55,058	55,058	55,058	55,058	55,058	55,058	
Stone, clay, and glass products.....										2,624	2,656	2,691	2,556	2,532	2,446	2,278	2,362	2,296	2,638	2,665	2,673	2,576	2,296	2,358	2,326	2,346	2,346	2,346	2,346	2,346	2,346	
Primary metals.....										9,097	9,074	8,849	8,695	9,401	8,924	9,000	9,046	8,847	9,107	9,014	8,809	8,754	9,056	9,131	8,996	8,886	8,886	8,886	8,886	8,886	8,886	
Fabricated metals.....										7,491	7,405	7,272	7,277	7,420	7,249	7,081	7,525	7,803	7,594	7,366	7,338	7,350	7,272	7,733	7,600	7,881	7,881	7,881	7,881	7,881	7,881	
Nonferrous metal machinery.....										11,163	11,150	11,212	11,069	10,843	10,993	11,176	11,252	11,114	11,135	11,266	11,213	11,116	11,218	11,384	11,192	11,192	11,192	11,192	11,192	11,192	11,192	11,192
Electrical machinery.....										7,801	7,581	7,381	7,556	7,340	7,626	7,336	7,336	7,375	7,851	7,836	7,743	7,718	7,430	7,537	7,483	7,535	7,535	7,535	7,535	7,535	7,535	
Transportation equipment.....										9,843	10,394	9,762	9,549	9,549	8,836	8,762	8,876	9,047	10,018	9,883	9,710	9,594	8,524	8,439	8,807	9,180	9,180	9,180	9,180	9,180	9,180	9,180
Transportation equipment.....										2,872	2,900	2,885	2,924	2,845	2,786	2,852	2,790	2,906	2,890	2,924	2,916	2,937	2,712	2,703	2,822	2,822	2,822	2,822	2,822	2,822	2,822	2,822
Instruments and related products.....										5,773	5,662	5,561	5,656	5,520	5,345	5,547	5,457	5,566	5,791	5,666	5,457	5,473	5,565	5,447	5,360	5,386	5,386	5,386	5,386	5,386	5,386	5,386
All other durable goods industries.....										36,227	36,786	36,311	36,673	36,412	35,372	35,114	35,339	34,851	35,780	36,503	36,297	36,675	34,220	35,055	35,229	35,375	35,375	35,375	35,375	35,375	35,375	
Nondurable goods industries.....										7,765	8,093	7,994	7,874	7,875	7,668	7,365	7,641	7,467	7,724	8,098	7,926	7,909	7,215	7,397	7,383	7,655	7,655	7,655	7,655	7,655	7,655	7,655
Chemicals and allied products.....										2,283	2,556	2,581	2,521	2,474	2,176	2,324	2,179	2,058	2,289	2,506	2,572	2,554	2,178	2,330	2,175	2,167	2,167	2,167	2,167	2,167	2,167	2,167
Petroleum and coal products.....										2,310	2,348	2,365	2,348	2,373	2,250	2,085	2,336	2,357	2,279	2,368	2,370	2,353	2,128	2,262	2,360	2,402	2,402	2,402	2,402	2,402	2,402	2,402
Rubber and plastics products, n.e.c.....										23,943	23,827	23,391	23,930	23,690	23,478	23,340	23,383	22,969	23,488	23,531	23,429	23,859	22,699	23,066	23,311	23,151	23,151	23,151	23,151	23,151	23,151	23,151
WORK IN PROCESS																																
All manufacturing industries.....										97,598	97,004	96,376	96,912	95,366	92,042	90,648	89,360	87,158	97,779	97,073	96,116	97,586	90,782	89,743	89,134	89,686	89,686	89,686	89,686	89,686	89,686	
Durable goods industries.....										82,902	82,431	81,769	81,933	80,584	77,935	76,691	75,512	73,329	83,166	82,433	81,608	82,495	76,933	75,850	75,360	75,638	75,638	75,638	75,638	75,638	75,638	
Stone, clay, and glass products.....										987	973	929	940	933	851	857	862	839	975	971	963	998	846	881	892	893	893	893	893	893	893	
Primary metals.....										9,562	9,157	9,157	9,157	9,157	7,960	7,999	8,436	8,109	9,707	9,438	9,122	9,222	8,293	8,415	8,460	8,425	8,425	8,425	8,425	8,425	8,425	
Fabricated metals.....										7,920	7,905	7,886	7,826	7,815	7,797	7,797	7,797	7,797	7,797	7,797	7,797	7,797	7,685	7,797	7,834	7,834	7,834	7,834	7,834	7,834	7,834	
Nonferrous metal machinery.....										18,472	18,327	17,828	18,000	17,844	17,556	17,791	17,757	17,532	18,352	18,014	17,789	18,149	17,803	17,599	17,730	18,072	18,072	18,072	18,072	18,072	18,072	18,072
Electrical machinery.....										13,368	13,465	13,290	13,098	12,893	12,452	12,116	11,828	11,561	13,399	13,420	13,375	13,300	12,087	11,957	11,900	11,905	11,905	11,905	11,905	11,905	11,905	
Transportation equipment.....										24,975	24,762	25,022	25,107	24,600	23,902	23,156	21,622	20,520	25,093	24,895	24,662	25,024	22,755	21,803	21,280	20,878	20,878	20,878	20,878	20,878	20,878	
Transportation equipment.....										4,154	4,154	4,176	4,169	4,059	4,064	3,882	3,920	3,690	4,167	4,170	4,201	4,226	4,068	4,053	3,969	4,062	4,062	4,062	4,062	4,062	4,062	
Instruments and related products.....										3,464	3,530	3,531	3,636	3,489	3,353	3,288	3,345	3,338	3,484	3,526	3,522	3,577	3,396	3,345	3,335	3,403	3,403	3,403	3,403	3,403	3,403	
All other durable goods industries.....																																

Table 6. PERCENT CHANGES AND REVISIONS FOR MANUFACTURERS' SHIPMENTS, INVENTORIES, AND ORDERS

(Based on seasonally adjusted data)

Item and industry group	Percent changes							Revisions ²		
	Month-to-month			Average monthly rates of change ¹				Year ago Aug. 1980	Average monthly	
	July 1981- Aug. 1981	June 1981- July 1981	May 1981- June 1981	Second quarter 1981	First quarter 1981	Fourth quarter 1980	Sept. 1980 through Aug. 1981		Aug. 1980 through July 1981	Aug. 1976-1980
Shipments:										
All manufacturing industries.....	-0.8	-0.8	+2.4	+1.1	+0.4	+1.4	+0.9	0.5	0.3	0.4
Durable goods industries.....	-1.4	-1.9	+2.4	+1.4	+0.6	+1.5	+1.1	-	0.4	0.2
Nondurable goods industries.....	-0.2	+0.3	+2.3	+0.8	+0.2	+1.3	+0.8	0.2	0.4	0.4
Inventories:										
All manufacturing industries.....	+0.3	+0.8	+0.2	+0.4	+1.1	+0.1	+0.5	-	0.1	-
New orders:										
All manufacturing industries.....	-1.9	+0.8	+0.9	+0.7	+0.1	+1.5	+0.9	0.2	0.4	0.5
Durable goods industries.....	-3.5	+1.3	+0.2	+0.6	+0.1	+1.8	+1.0	1.2	0.6	0.9
Nondurable goods industries.....	-0.1	+0.4	+1.8	+0.8	+0.1	+1.3	+0.7	0.6	0.4	0.4
Unfilled orders:										
Durable goods industries.....	+0.2	+0.8	-0.2	+0.2	+0.4	+0.5	+0.4	0.1	0.1	0.1

- Represents zero.

¹Method of calculation of these percentages for the quarter and the 12-month time intervals reflect compounded monthly growth rates.²The revisions are the differences between the month-to-month percent changes of the preliminary and final estimates. The monthly averages are the simple averages of the differences, without regard to sign, for the months specified. The advance to final percent change differences for the durable goods industries are shown in the advance report for the month.

Table 7. RATIO OF MANUFACTURERS' INVENTORIES TO SHIPMENTS AND UNFILLED ORDERS TO SHIPMENTS, BY INDUSTRY GROUP

(Based on seasonally adjusted data)

Industry group	Inventories--shipments ratio				Unfilled orders--shipments ratio ¹ (months' backlog)			
	Aug. 1981 ^P	July 1981 ^F	June 1981	May 1981	Aug. 1981 ^P	July 1981 ^F	June 1981	May 1981
All manufacturing industries.....	1.62	1.60	1.57	1.61	3.70	3.65	3.62	3.69
Durable goods industries.....	2.12	2.08	2.01	2.05	4.41	4.36	4.30	4.40
Stone, clay, and glass products.....	1.68	1.56	1.57	1.56	0.65	0.62	0.63	0.61
Primary metals.....	2.04	2.00	1.98	1.96	2.41	2.43	2.42	2.46
Fabricated metals.....	1.94	1.90	1.89	1.87	3.12	3.16	3.10	3.07
Machinery, except electrical.....	2.44	2.40	2.33	2.39	4.77	4.74	4.72	4.86
Electrical machinery.....	2.27	2.22	2.20	2.20	4.39	4.31	4.29	4.24
Transportation equipment.....	2.04	2.08	1.89	2.01	10.72	10.93	10.16	11.11
Instruments and related products.....	2.29	2.22	2.26	2.29	1.71	1.67	1.66	1.66
Nondurable goods industries.....	1.09	1.10	1.10	1.13	0.67	0.66	0.68	0.69
Food and kindred products.....	0.95	0.96	0.96	1.01	(X)	(X)	(X)	(X)
Tobacco products.....	3.31	3.15	3.09	3.58	(X)	(X)	(X)	(X)
Textile mill products.....	1.48	1.47	1.48	1.51	(NA)	(NA)	(NA)	(NA)
Paper and allied products.....	1.32	1.30	1.30	1.28	(NA)	(NA)	(NA)	(NA)
Chemicals and allied products.....	1.33	1.30	1.32	1.35	(X)	(X)	(X)	(X)
Petroleum and coal products.....	0.55	0.61	0.61	0.63	(X)	(X)	(X)	(X)
Rubber and plastics products, n.e.c.....	1.40	1.37	1.38	1.46	(X)	(X)	(X)	(X)

(NA) Not available. ^PPreliminary. ^FRevised. (X) Not applicable.¹Excludes the following industries with no unfilled orders: Wood and lumber products; glass containers; metal cans, barrels, and drums; farm machinery and equipment; motor vehicle assembly operation; other transportation equipment; foods and related products; tobacco; apparel and related products; building paper; die-cut paper and board; chemicals; petroleum and coal products; and rubber and plastics products, n.e.c.

DESCRIPTION OF SURVEY

The Manufacturers' Shipments, Inventories, and Orders Survey provides broad-based monthly statistical data on economic conditions in the domestic manufacturing sector. It is designed to measure current industrial activity and to provide an indication of future trends. The data are used extensively by the executive branch of the Government in developing economic, fiscal, and monetary policy; by the Bureau of Economic Analysis (BEA) as components of the gross national product estimates; and by trade associations, corporate economists, and other members of the business community as an analytical tool in their assessment of the current and future economic condition of the country.

The M3 shipments and inventory data are comparable to the totals published in the Annual Survey of Manufactures (ASM). The ASM is a sample survey of approximately 70,000 manufacturing establishments drawn from a 5-year census of manufacturing universe of about 350,000 manufacturing establishments. In the ASM, each manufacturing location reports data on value of shipments, beginning and end-of-year inventories, as well as various other economic variables.

The monthly M3 estimates through 1980 are based on information obtained from approximately 4,500 reporting units and include most manufacturing companies with 1,000 or more employees. In addition, selected smaller companies are included to strengthen the sample coverage in individual industry categories. For firms which operate in a single M3 industry category, the reporting unit typically comprises all operations of the company. At the request of the Census Bureau, most large, diversified companies file separate reports for divisions which operate in different industrial areas.

Each company or reporting unit of a company in the survey is classified into 1 of 79 industry categories for which separate estimates are made based on the major activity of the reporting unit. Some reporting units include industry activities outside the M3 category in which they are classified. The survey methodology assumes that the month-to-month changes of the reporting units classified in each industry category effectively represent the month-to-month movements of the establishments in the SIC industries which make up the category.

The M3 series is periodically benchmarked to the Census of Manufactures and the ASM for shipments and inventories. The most recent benchmark included data for 1977 and 1978. Since benchmark data for unfilled orders are not available, levels are based upon the ratio of unfilled orders to shipments of reporting companies. In the 1977-1978 benchmark report, unfilled orders levels were revalued based on unfilled orders to shipments ratios of reporting companies in the monthly M3 survey; the MA-300, a one-time annual supplemental survey of multi-establishment companies; and the ASM for single-establishment companies.

MONTHLY ESTIMATING PROCEDURE

The monthly estimates of shipments, unfilled orders, and total inventories are derived for each industry category by

multiplying the industry estimate for the previous month by the percentage change from the previous month for companies reporting in the current month.

Though collected as a separate item, new orders are not calculated according to the standard ratio-estimate procedure. The reason for this is that not all companies report new orders and some that do report this item limit their reporting to specific products for which long lead times are required in the production cycle. These companies, in effect, exclude new orders received for products that are shipped from inventory. New orders are, therefore, computed by adjusting the current month's shipments by the change in the backlog of unfilled orders. (New orders equal current month shipments plus current month unfilled orders minus prior month unfilled orders.) Thus, the estimate of new orders includes orders that are received and filled in the same month as well as new orders that have not yet been filled. Also included are the effects of cancellations and modifications on previously reported orders.

SEASONAL ADJUSTMENT

The monthly data on shipments, inventories, and unfilled orders are adjusted for seasonality at the most detailed level tabulated in the survey, using the X-11 variant of the Census Bureau's seasonal adjustment program. Data from January 1958 through December 1980 are included in the calculations of the factors used in this publication.

Seasonally adjusted industry aggregates are derived by adding seasonally adjusted components rather than by direct seasonal adjustment of the aggregates. New orders data are not independently seasonally adjusted but are derived at the most detailed levels from the seasonally adjusted shipments and the change in the seasonally adjusted unfilled orders and then similarly aggregated.

EXPLANATION OF TERMS

Value of Shipments—The shipments estimates published in the monthly survey are equivalent to value of shipments as reported in the ASM which are net selling values, f.o.b. plant, after discounts and allowances and excluding freight charges and excise taxes. Included in shipments is the value of all products sold, transferred to other plants of the same company, or shipped on consignment.

Shipments also include receipts for contract work performed for others, resales, receipts for miscellaneous activities such as the sale of scrap and refuse; value of installation and repair work performed by employees of the plant; and value of research and development performed at the plant. In the shipbuilding industry, the value of shipments in a given time period varies considerably from the value of work done because of the long lead time between the input of the materials and labor and the delivery of the completed ship. For this industry and for aircraft and missile producers working under cost-plus contracts, the value of work done during the year is requested rather than the value of shipments.

The value of shipments figures developed from the ASM contain duplication at the all manufacturing and M3 industry

category levels since the products of some four-digit SIC industries are used as materials by other industries within the same industry aggregate. The significance of the duplication within the specific M3 industry categories varies depending on their four-digit industry composition. It is most pronounced in a few highly integrated industry areas, such as primary metals and motor vehicles and parts.

For multiunit companies, the M3 reports received each month typically are not plant reports but are company or divisional level reports that encompass groups of plants. The actual sales reported are usually net sales and receipts from customers and exclude the duplication of interplant transfers. The reported sales are used to calculate month-to-month changes which bring forward the plant-based shipments for the industry category as estimated in the ASM.

Inventories—In the monthly survey and in the ASM, respondents are asked to report their inventories at book values. Since different methods of inventory valuation are used (LIFO, FIFO, etc.), the definition of the value of aggregate inventories for all plants in an industry is not precise.

There are also some inconsistencies between the M3 company or divisional reported inventory levels as compared with the ASM establishment reported levels. The change in the value of inventories, month-to-month as well as year-to-year, is considered to have greater significance and reliability.

Inventory data are requested from respondents by stage of fabrication, i.e., finished goods, work in process, and raw materials and supplies. However, the quality of these data is limited due to lower response rates and the inclusion of the same type of inventory under different stages of fabrication in the aggregate statistics.

New Orders Received and Unfilled Orders—Orders as reported in the monthly survey are net of cancellations received during the month on orders previously reported. They include orders received and filled during the month as well as orders received for future delivery. They also include the net sales value of contract changes which increase or decrease the sales value of the unfilled orders to which they relate. Orders are defined to include only those supported by binding legal documents such as signed contracts, letters of award, or letters of intent, although in some industries this definition may not be strictly applicable. In the case of letters of intent, the full amount of the sales value is included if the parties are in substantial agreement on the amount; otherwise, only the funds specifically authorized to be expended are included.

Unfilled orders include orders as defined above that have not been reflected as shipments. Generally, unfilled orders at the end of the reporting period are equal to unfilled orders at the beginning of the period plus net new orders received less net shipments.

How Profitable Are Your Consumer Relations?

Here's How To Make Them Better.

Here are five special guides to help you improve your consumer relations—with positive benefits to your company and your customer. Prepared as part of a unique cooperative project between government and industry, these guides provide straightforward guidance in dealing effectively with the consumer issues you face every day.

U.S. DEPARTMENT OF COMMERCE
Office of Consumer Affairs

Managing Consumer Complaints

\$1.75

Practical, sensible procedures that you can use to review and resolve consumer complaints—and even turn them into valuable management and marketing tools.

Consumer Product Safety

\$2.50

How you can help protect consumers and minimize your company's exposure to liability. Geared especially to smaller firms.

Credit and Financial Issues

\$2.25

Nuts-and-bolts information on legislation, effective policies, and specific recommendations for action you can take. An ideal guide for a smaller business.

Advertising, Packaging, and Labeling

\$2.25

A must for businesses doing in-house advertising. Practical advice on preparing ads and designing packaging and labeling to create a positive image of you and your products.

Product Warranties and Servicing

\$2.25

A step-by-step guide through this complex subject. Types of warranties, applicable laws and regulations, and tips on preparing the best warranty for your needs.



ORDER FORM To:

Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402

Enclosed is \$_____ ☐ check,
☐ money order, or charge to my
Deposit Account No.

_____-_____
Order No. _____



Credit Card Orders Only

Total charges \$_____ Fill in the boxes below.

Credit Card No. _____

Expiration Date
Month/Year _____

Please send me

- _____ copies of **Managing Consumer Complaints**
No. 003-000-00570-4 \$1.75
- _____ copies of **Consumer Product Safety**
No. 003-000-00572-1 \$2.50
- _____ copies of **Credit and Financial Issues**
No. 003-000-00571-2 \$2.25

- _____ copies of **Advertising, Packaging and Labeling**
No. 003-000-00567-4 \$2.25
- _____ copies of **Product Warranties and Servicing**
No. 003-000-00566-6 \$2.25

Name—First, Last _____

Company name or additional address line _____

Street address _____

City _____ State _____ ZIP Code _____

(or Country) _____

PLEASE PRINT OR TYPE

Note: You may deduct 25% if you order 100 or more copies of any title (mailed to the same address).

For Office Use Only

Quantity	Charges
..... Enclosed	
..... To be mailed	
..... Subscriptions	
Postage	
Foreign handling	
MMOB	
OPNR	
..... UPNS	
..... Discount	
..... Refund	

U.S. Department
of Commerce
BUREAU OF THE CENSUS
Washington, D.C. 20233

Official Business
Penalty for Private Use, \$300



3 1262 08590 3481

COM-202



First Class Mail

